



Attitude on Counseling about Tobacco and Electronic Nicotine Delivery Systems

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Abstract

Purpose: The purpose of this study was to assess for differences in pediatric dentists’ attitudes between tobacco and electronic nicotine delivery system (ENDS) prevention and counseling; and to determine barriers in providing prevention and cessation counseling on these smoking habits.

Methods: A self-administered online survey was sent to members of the American Academy of Pediatric Dentistry (n=6918) to assess their comfort and clinical practice in providing counseling to patients in the use of tobacco and ENDS.

Results: There was a 0.04% response rate. A majority of the respondents were female (63%), practicing in a group practice of 2 or more dentists (51%) and in an urban location (79%). Dentists with more years of practice were more likely to advise (P<.001), assess (P<.05), refer (P<.05) and follow-up (P<.01) on patients regarding tobacco use. Similarly, these dentists were more likely to advise (P<.001), assess (P<.05) and follow-up (P<.01) on patients regarding ENDS use. Those with training were more likely to assess (P<.05) and refer (P<.01) patients using tobacco products. Regarding ENDS counseling, they were also more likely to assess (P<.05), refer (P<.05) and follow-up (P<.001) on these patients. A majority (53.1%) of respondents reported not receiving formal training in smoking counseling. Barriers to providing tobacco and ENDS counseling include patients’ ages, confidentiality, difficulty to raise issue and lack of knowledge.

Conclusion: This study exposed multiple barriers that pediatric dentists face in smoking counseling and opportunities to intervene to improve residency programs’ curriculums and communication practices.

Background

According to the Surgeon’s general report in 2014, nearly 90% of users start using tobacco by age 18.(1) Additionally, e-cigarette is most commonly used by middle and high schoolers in 2020.(2) Nicotine has adverse health effects such as increased risk of developing psychiatric disorders and cognitive problems.(3-6) Since pediatric dentists work closely with this age group, they have the opportunity to prevent adolescents from using such products.

Moreover, pediatric dentists may be the first to realize the use these products in adolescents due to the various overt oral health effects such as nicotine stomatitis and candidiasis.(7, 8) Growing evidence suggest that vapours found in ENDS are toxic and carcinogenic.(9) Therefore, pediatric dentists are well positioned to not only assess for but provide counseling on the use of tobacco and ENDS products. The AAPD recognizes this important opportunity in their members’ role and encourages oral health professionals to educate patients and parents on the oral health effects of ENDS, document tobacco use and provide prevention and cessation counseling for tobacco use.(10, 11) To date, no studies have assessed the attitudes and training of pediatric dentists in both tobacco and ENDS use.

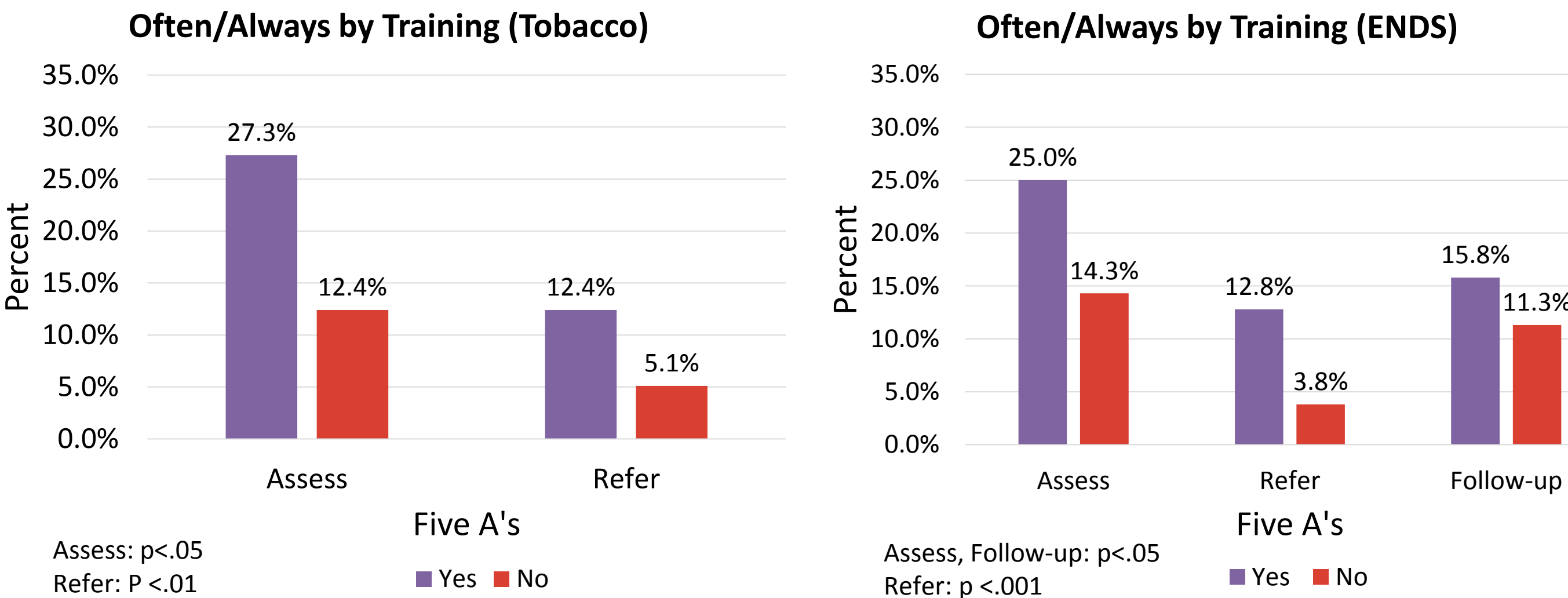
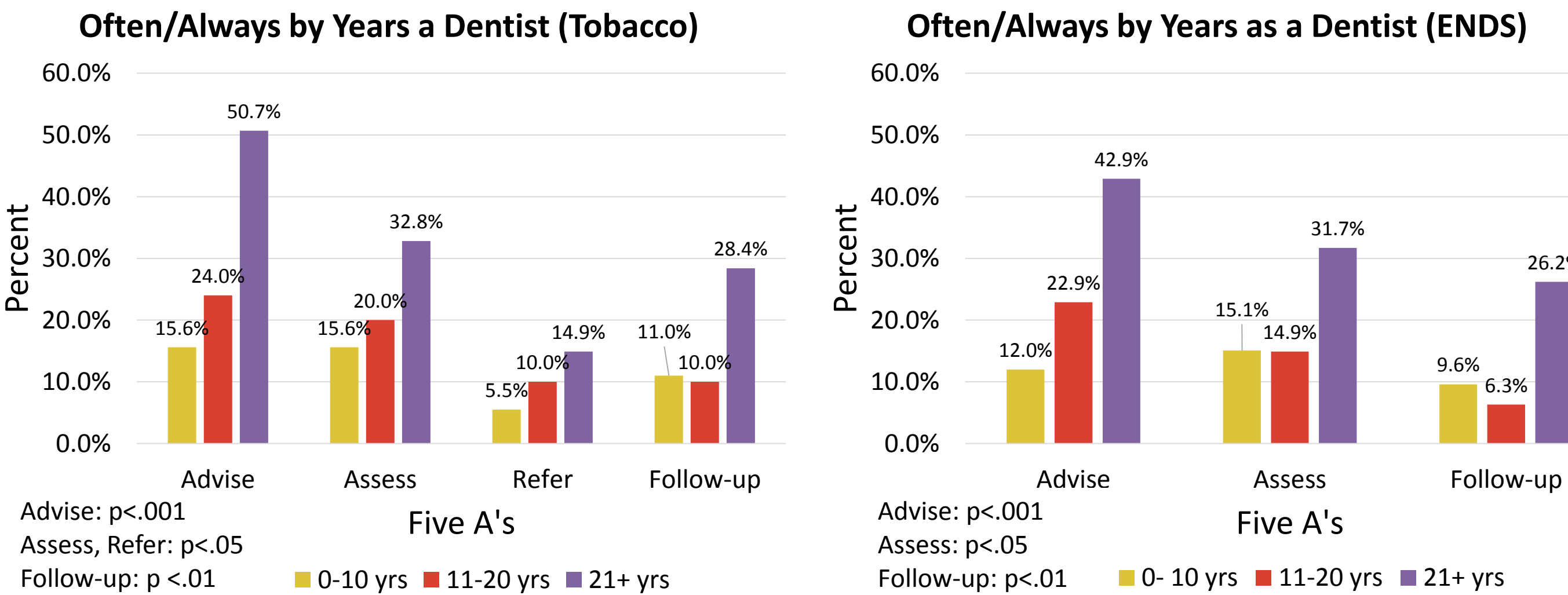
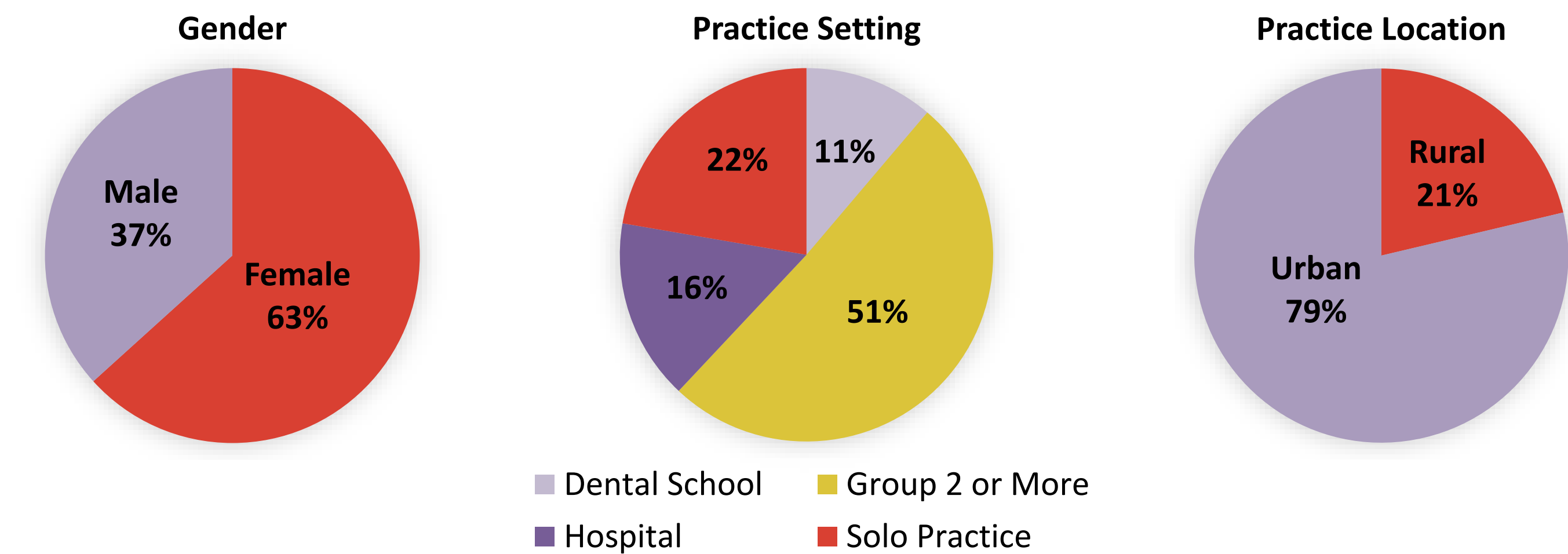
Study Objectives and Purpose

- to determine current pediatric dentists’ and dental residents’ attitudes, knowledge, and training in tobacco and ENDS prevention and cessation counseling
- to understand current trends in tobacco and ENDS training across the country and if there are any discrepancies between the use of each product

Study Design

Parameters	
Study Design	<ul style="list-style-type: none">Cross-sectional, prospective study hosted on SurveyMonkey.Measures: 29 item questionnaire assessing participants’ demographic factors, attitude and clinical practice in assessing and counseling patients on the use of tobacco and ENDS.
Participants	Active members of AAPD and current post-graduate pediatric dental residents
Procedures	<ul style="list-style-type: none">The study was conducted during approved IRB time frame of April 2021-June 2022.Initial surveys emailed out on July 19 2021 with follow up emails in August and September.
Methods	<ul style="list-style-type: none">Frequency and descriptive statistical analyses was conducted for all study variables.Chi-square analysis assessed relationships where variables are categorical and correlational analysis will be used when variables are continuous.Logistic regression analysis was used to determine best predictors of dentists providing tobacco and/or ENDS counseling
Missing Data	Incomplete data will not be used in this study

Results



Results

Have you received formal training in counseling patients to stop smoking? 53.1% stated no			Challenges to incorporating cessation into dental practice	
			Tobacco Cessation	ENDS Cessation
AGE	Age you begin asking about tobacco use?	Age you begin asking about ENDS use?	Patient's age (n=45) Majority of patients are children	Difficult to talk about/Hard to raise issue (n=42) Provider Lack of comfort in raising issue
	≤12	7.4%	5.1%	Confidentiality (n=43) Hard to discuss with patients in front of parents
	13-17	37.6%	34.6%	Patient's Age (n=33) Majority of patients are children
	18-24	10.1%	7.0%	Confidentiality (n=26) Hard to discuss with patients in front of parents
	≥25	-----	.8%	Usage is rare/Does not apply to population (n=42) Low frequency of use
	Don't Ask	45.0%	52.5%	Difficult to talk about/Hard to raise issue (n=30) Provider Lack of comfort in raising issue
				Usage is rare/Does not apply to population (n=22) Not applicable to my patient base
			Lack of Time/Time spent discussing other issues (n=29) Tooth decay/carries a higher priority	Lack of knowledge, did not receive training/practice on ENDS (n=18) Not sure what ENDS is

Discussion

- Older dentists were significantly more likely than younger dentists to provide tobacco and ENDS counseling which may be due to having more experience and hence confidence.
- There may be a knowledge gap in providing tobacco and ENDS counseling as older dentists were not assessing for ENDS use as they were for tobacco use.
- Dentists with more practice experience were more likely to provide some form of tobacco and ENDS counseling which correlates with older dentists providing such counseling more than younger dentist.
- Male participants were more likely than female to follow up on ENDS but this may due to small sample size of male respondents surveyed.
- Challenges to incorporate smoking counseling suggestion that more training in motivational interviewing may providers better attempt to speak about such issues.
- Barriers that respondents report show a lack of knowledge about the AAPD guidelines’ recommendation to begin talking about tobacco and ENDS use at ages 6-12 years. (12)
- With a low response rate, increasing the sample size may help reveal statistically significance factors associated with dentists’ attitude and practice in tobacco and ENDS counseling that was not apparent in this study.
- As this is a self-reported survey, those that complete the survey may be more willing to participate in providing tobacco and ENDS counseling which may skew results.
- Improving residency training programs such as mandating tobacco and ENDS interviewing training may help younger dentist feel more confident to provide guidance to their young patients.
- Further research to explore various methods of introducing and providing smoking counseling such as informational videos in waiting rooms, pamphlets, and anticipatory guidance techniques may improve dentists’ knowledge and ability to approach this sensitive issue.

Conclusion

This study exposed multiple barriers that pediatric dentists face in providing tobacco and ENDS counseling and identified opportunities to improve residency programs’ curriculums and communication practices.

References

